



October 3, 2015

(b) (6)

Location Code: GKMTW261

(b) (6), (b) (9)

Durango, CO 81303

Re: Groundwater Well Sampling Results

Dear (b) (6):

Thank you for participating in the private well water sampling conducted by the U.S. Environmental Protection Agency (EPA) in coordination with the Colorado Department of Public Health and Environment (CDPHE) and the San Juan Basin Health Department (SJBHD).

This letter provides the results for the water samples collected from your private water well. The water sample(s) were submitted to, and analyzed by, a private certified laboratory for the metals that could have been present in water from the Gold King Mine release.

The test results for your well water were compared to the National Drinking Water Standards, otherwise known as the Maximum Contaminant Levels (MCLs). The results of the analysis are provided in the enclosed table. Though these standards are intended for the evaluation of public water systems and therefore, do not apply to private domestic water wells such as yours, we have included the enclosed table so that you may compare the results with the Drinking Water Standards. **None of these metals were present in the water sample(s) collected from your property, above a level of concern for human health exposure.**

EPA has also established National Secondary Drinking Water Regulations that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels". They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health at the secondary maximum contaminant level. **The following metals were present in your groundwater sample, above the EPA's Secondary Drinking Water MCLs. You may want to consider a water filtration system and follow the manufacturer's recommendations for maintaining your filtration system in order to preserve the safety of your drinking water.**

#### **Aluminum**

The concentration of aluminum in your well water was above the secondary MCL which is 50 to 200 ug/L. Aluminum is an odorless, tasteless element that enters groundwater drinking sources through erosion of natural deposits or from human-made sources. High aluminum can precipitate

out of water after treatment, causing increased turbidity, discolored water or scaling on plumbing fixtures.

### **Iron**

The concentration of iron in your well water was above the secondary MCL which is 300 µg/L. Iron is an essential element for human nutrition however, high iron can cause constipation and other gastrointestinal effects. In addition, high iron may stain household fixtures and impart a metallic taste and red color to the water.

### **Manganese**

The concentration of manganese in in your well water was above the secondary MCL of 50 µg/L. High manganese can impart a bitter, unpleasant taste and odor to drinking water and can cause dark staining and mineral deposits on plumbing features.

The Colorado Department of Public Health and Environment recommends using the Water Quality Interpretation Tool created by Colorado State University in collaboration with the Colorado Water Institute to get more information regarding the metals examined in your well. The Water Quality Interpretation Tool is available online at <https://erams.com/wqtool/>.

If you have any health related questions regarding these test results, please contact Flannery O'Neil with the San Juan Basin Health Department (SJBHD) at (970) 247-5702. If you would like to discuss your sample results with an EPA representative, please contact Dr. Deborah McKean at (303) 579-4371.

Sincerely,

US Environmental Protection Agency, Region 8



|               |             |       |                |         |  |                  |
|---------------|-------------|-------|----------------|---------|--|------------------|
| Analyte       | Location ID |       |                |         |  | GKMTW261         |
|               | Sample ID   |       |                |         |  | GKMTW261_081615  |
|               | Sample Date |       |                |         |  | 8/16/2015        |
|               | Sample time |       |                |         |  | 16:55            |
|               | Latitude    |       |                |         |  | (b) (6), (b) (9) |
|               | Longitude   |       |                |         |  |                  |
|               |             |       | Colorado       |         |  | Sub Location     |
| Metals, Total | CAS NO      | Units | Water Standard | EPA MCL |  | Outdoor spigot   |
|               |             |       |                |         |  | Lab Result       |
| Aluminum A,B  | 7429-90-5   | ug/L  | 5000           | 200     |  | 1800             |
| Antimony      | 7440-36-0   | ug/L  | 6              | 6       |  | 0.4 U            |
| Arsenic       | 7440-38-2   | ug/L  | 10             | 10      |  | 3.7              |
| Barium        | 7440-39-3   | ug/L  | 2000           | 2000    |  | 92               |
| Beryllium     | 7440-41-7   | ug/L  | 4              | 4       |  | 0.15 U           |
| Cadmium       | 7440-43-9   | ug/L  | 5              | 5       |  | 0.043 U          |
| Calcium       | 7440-70-2   | ug/L  |                |         |  | 16000            |
| Chromium      | 7440-47-3   | ug/L  | 100            | 100     |  | 3.3              |
| Cobalt A      | 7440-48-4   | ug/L  | 50             |         |  | 1.8              |
| Copper A      | 7440-50-8   | ug/L  | 200            | 1300    |  | 60               |
| Iron A,B      | 7439-89-6   | ug/L  | 5000           | 300     |  | 2700             |
| Lead A        | 7439-92-1   | ug/L  | 100            | 15      |  | 13               |
| Magnesium     | 7439-95-4   | ug/L  |                |         |  | 1500             |
| Manganese A,B | 7439-96-5   | ug/L  | 200            | 50      |  | 160              |
| Mercury       | 7439-97-6   | ug/L  | 2              | 2       |  | 0.08 UJ          |
| Molybdenum    | 7439-98-7   | ug/L  |                |         |  | 16               |
| Nickel A      | 7440-02-0   | ug/L  | 200            |         |  | 3                |
| Potassium     | 7440-09-7   | ug/L  |                |         |  | 930 J            |
| Selenium      | 7782-49-2   | ug/L  | 50             | 50      |  | 0.58 U           |
| Silver B      | 7440-22-4   | ug/L  |                | 100     |  | 0.1 U            |
| Sodium        | 7440-23-5   | ug/L  |                |         |  | 120000           |
| Thallium      | 7440-28-0   | ug/L  | 2              | 2       |  | 0.1 U            |
| Vanadium A    | 7440-62-2   | ug/L  | 100            |         |  | 3.3              |
| Zinc A,B      | 7440-66-6   | ug/L  | 2000           | 5000    |  | 35               |

A- CDPHE Agricultural Standards (Jan. 2013)

B- EPA Secondary MCL (May 2009)

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

J- = The result is an estimated quantity, but the result may be biased low.

UJ = The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise

UJB = The analyte was detected in the sample below the reporting limit and in either the associated laboratory blank or field blank; the analyte result was reported as non-detected at the RL due to blank contamination. The reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

UB = The analyte was detected in the sample below the Reporting Limit (RL) and in either the associated laboratory blank or field blank; the analyte result was reported as non-detected at the RL due to blank contamination.

J+ = The result is an estimated quantity, but the result may be biased high.

R = Reported value is "rejected." The sample results are rejected due to serious deficiencies in meeting QC criteria. The data are unusable. The analyte may or may not be present in the sample.

F1 = MS and/or MSD Recovery is outside acceptance limits.

HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

\* = The result exceeds maximum contaminant level

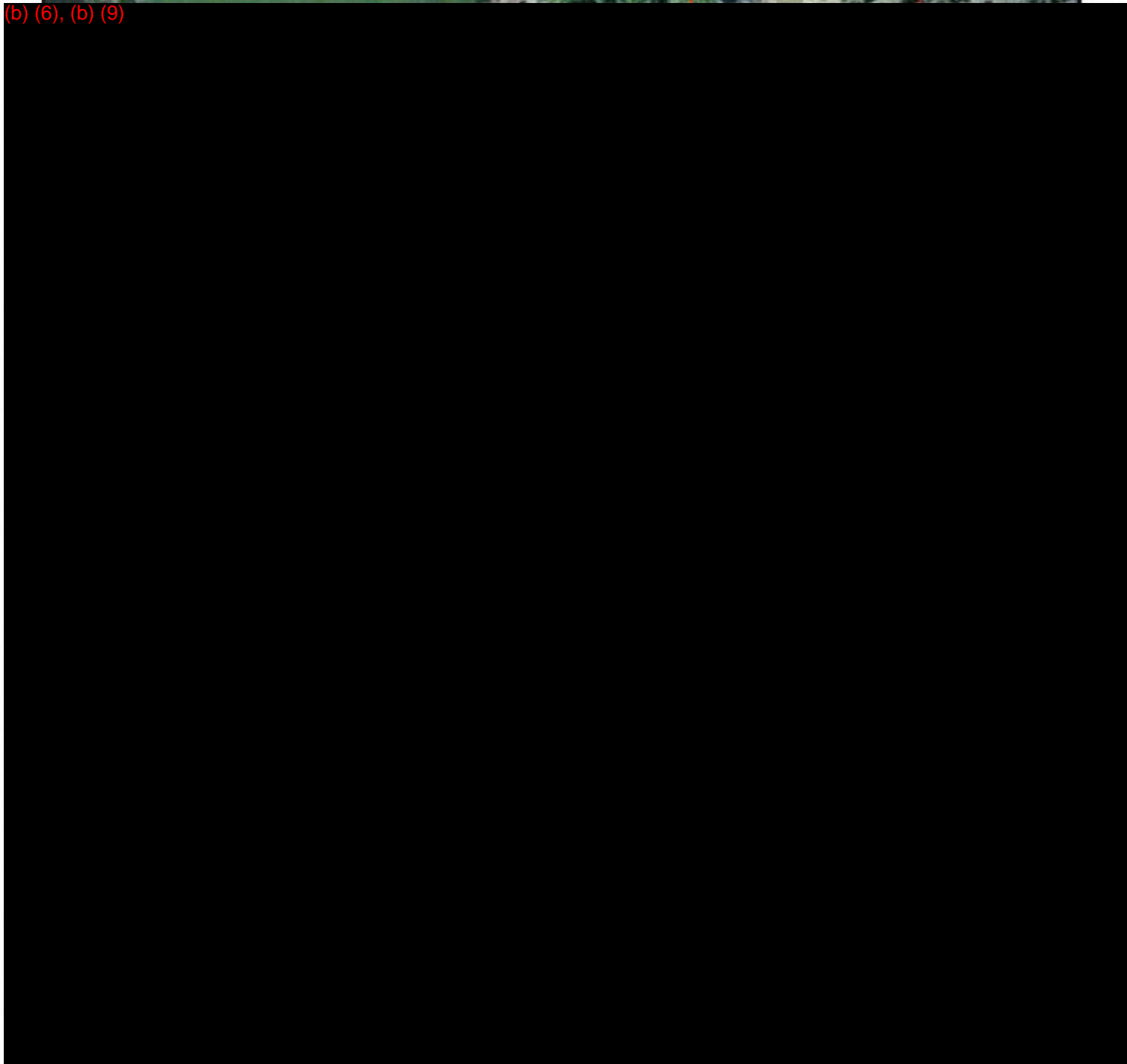
ug/L - Parts per billion (micrograms per liter)

Highlighted Yellow: indicates result exceeded Screening Value

# Property ID: GKMTW261



(b) (6), (b) (9)



Map Created: 10/2/2015

Document Path: C:\GOLD KING\GKM Data & GIS Backups\JV\Maps\20151002\Soil DD\_Maps\_20151002\_sj.mxd



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8  
1595 WYNKOOP - MC 8RC  
DENVER, CO 80202-1129  
Phone 800-227-8917

## HOW TO FILE A CLAIM

*EPA is committed to taking responsibility for the impacts to communities affected by the Gold King Mine Release.*

To file a claim for monetary compensation, please visit the Region 8 Gold Mine Release Incident website:

<http://www2.epa.gov/goldkingmine>

Complete the fillable PDF version of the Standard Form 95:

[http://www2.epa.gov/sites/production/files/2015-08/documents/standardform95\\_4.pdf](http://www2.epa.gov/sites/production/files/2015-08/documents/standardform95_4.pdf)

Email the signed Standard Form 95 to:

**R8 GKM Claims@epa.gov**

Or mail the Standard Form 95 to the following contacts:

Richard Feldman  
Claims Officer  
U.S. EPA Office of General Counsel  
1200 Pennsylvania Avenue, NW (MC 2399A)  
Washington, D.C. 20460

Michael Nelson  
U.S. EPA Region 8 Office of Regional Counsel  
1595 Wynkoop Street (MC 8RC)  
Denver, CO 80202